

## CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A message storage system comprising:
  - a network attached storage server;
  - and
  - an exchange server coupled to the network attached storage server through a network, the exchange server comprising:
    - a rotating disk store;
    - a solid state store comprising an exchange database;
    - a computing engine coupled to the rotating disk store and the solid state store, the computing engine comprising:
      - a scheduler having programmed instructions operable to instance an archiver and a software backup to execute alternately,
      - the archiver having programmed instructions operable to relocate to a queue a first plurality of messages selected from the exchange database according to a criterion of age and further operable to relocate the first plurality of messages from the queue to the network attached storage server,
      - the software backup having programmed instructions operable to partition the exchange database into a plurality of storage groups, and for each respective storage group comprising a second plurality of messages, to maintain a patch file and to copy a set of images of the

second plurality of messages to a backup file, the patch file operable to record a plurality of transactions applied to the respective storage group throughout the period of the copying of the set of images.

2. The system of Claim 1 wherein the scheduler is further operable to prevent concurrent execution of the archiver and the software backup.
3. The system of Claim 1 wherein the backup file resides on the rotating disk store.
4. The system of Claim 1 wherein the backup file resides on the network attached storage server.
5. A method for message storage comprising the acts of:
  - instanting an archiver having programmed instructions operable to relocate to a queue a first plurality of messages selected from an exchange database located on a solid state store according to a criterion of age and further operable to relocate the first plurality of messages from the queue to a network attached storage server;
  - instanting a software backup having programmed instructions operable to partition the exchange database into a plurality of storage groups, and for each respective storage group comprising a second plurality of messages, to maintain a patch file and to copy a set of images of the second plurality of messages to a backup file, the patch file operable to record a plurality of transactions applied to the respective storage group throughout the period of the copying of the set of images;
  - and
  - repeating the instantings periodically, whereby archive and backup activities are performed alternatively and periodically.

6. The method of Claim 5 further comprising:

providing a scheduler operable to prevent concurrent execution of the software archiver subsystem and the software backup subsystem.

7. The method of Claim 5 wherein the backup file resides on the network attached storage server.

8. A set of computer executable codes embodied on a computer-readable medium for a message storage system comprising:

a first set of instructions operable to instance an archiver having programmed instructions operable to relocate to a queue a first plurality of messages selected from an exchange database located on a solid state store according to a criterion of age and further operable to relocate the first plurality of messages from the queue to a network attached storage server;

a second set of instructions operable to instance a software backup having programmed instructions operable to partition the exchange database into a plurality of storage groups, and for each respective storage group comprising a second plurality of messages, to maintain a patch file and to copy a set of images of the second plurality of messages to a backup file, the patch file operable to record a plurality of transactions applied to the respective storage group through the period of the copy of the set of images; and

a third set of instructions operable to repeat the first set of instructions and second set of instructions periodically.